UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,445	06/02/2006	Masao Nonaka	2006_0778A	6614

52349 7590 11/16/2010

WENDEROTH, LIND & PONACK L.L.P.
1030 15th Street, N.W.
Suite 400 East
Washington, DC 20005-1503

EXAMINER	
YANG, JAMES J	

ART UNIT	PAPER NUMBER
2612	

NOTIFICATION DATE	DELIVERY MODE
11/16/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com
eoa@wenderoth.com

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/581,445	**Applicant(s)** NONAKA ET AL.	
	Examiner JAMES YANG	**Art Unit** 2612	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 October 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1, 5-15, 30-31, 35-36, 38-39, 42-43, 45-47*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612

Continuation of 11. does NOT place the application in condition for allowance because: The applicant's arguments filed 10/07/2010 have been fully considered but are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to the applicant's arguments on pages 20-24 that the Abraham reference does not teach a one-way function, the examiner respectfully disagrees for the reasons set forth below. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the details regarding a "one-way function") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, the term one-way function, although taken in light of the specification, is interpreted as it is written in the claims, for example claim 1, and explained below. The Abraham reference teaches the use of secret keys (see Abraham, Col. 3, Lines 5-8). The Abraham reference further teaches a first key obtained by executing a one-way function on a key identical with the secret key (see Abraham Col. 3, Lines 21-23). The value Y is a first key, and it is obtained by decrypting, i.e. a one-way function, a value X and using a key that is identical with the secret key, K2. Thus, the term one-way function is generally interpreted as inputting two values on one end, and decrypting the two values to output a single value on another, thus the process of data in on one side, and data out on the other side defines the term one-way. Next, the Abraham reference teaches an authentication apparatus generating challenge data, and outputs the challenge data to the IC card via the card reader (see Abraham, Col. 3, Lines 13-21). The value X is transmitted to the card to determine whether or not the secret keys are a match. X can be interpreted as challenge data because X is a value derived by encrypting the secret key K1 to be compared to the secret key K2, hence challenge data. Thus the challenge data is the secret key K1 and a random number encrypted together. The Abraham reference further teaches the IC card receiving the challenge data, then generates encrypted response data using the first key, and outputting the response data to the authentication apparatus (see Abraham, Col. 3, Lines 25-28). The value Z is encrypted by using the secret key, K2, and the first key Y, and encrypting the two values to form value Z. It is noted also that the first key Y is interpreted as being derived by the challenge data X. The Abraham reference then teaches the authentication apparatus receiving the encrypted response data from the card, and then generating a second key by executing a funcion identical to the one-way function (see Abraham, Col. 3, Lines 28-30). Since the process to produce a second key, A, is performed by decrypting value Z and a random number, i.e. two input values to derive a single value A, the decryption process from value Z to A is identical to the one-way function used for value X to Y. Lastly, the Abraham reference teaches generating decrypted data using the second key (see Abraham, Col. 3, Lines 28-30) and performing authentication by judging whether or not the generated decrypted data matches the challenge data (see Abraham, Col. 3, Lines 30-32). It is also noted since the term "one-way function" is defined in the claims as a function executed "on a key that is identical with the secret key", as claimed in claim 1, the one-way function is separate from the secret key and thus may be generally interpreted as inputting two values, decrypting, and outputting a single value.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and KSR International Co. v. Teleflex, Inc., 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the access control system in Ahlstrom by incorporating the teaching of a challenge response authentication system as taught by Abraham. The motivation would be to protect useful information by first authenticating all components in an authentication system (see Abraham, Col. 1, Lines 63-66).